

Date: Thu, 24 Mar 94 04:30:30 PST
From: Ham-Equip Mailing List and Newsgroup <ham-equip@ucsd.edu>
Errors-To: Ham-Equip-Errors@UCSD.Edu
Reply-To: Ham-Equip@UCSD.Edu
Precedence: Bulk
Subject: Ham-Equip Digest V94 #76
To: Ham-Equip

Ham-Equip Digest Thu, 24 Mar 94 Volume 94 : Issue 76

Today's Topics:

 2m HT recommendations ? (2 msgs)
 Batteries for HTX-202
 HTX-202
 Kenwood (TS-850) Computer Interface Info Wanted
 list
 Need Manuals for SWAN 350
 Question on Yaesu ear mike
 QUESTIONS ON YAESU FT101E
 RF and AF speech processors. Was: FT-990 vs TS-850
 Yaesu ft530 question

Send Replies or notes for publication to: <Ham-Equip@UCSD.Edu>
Send subscription requests to: <Ham-Equip-REQUEST@UCSD.Edu>
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Ham-Equip Digest are available
(by FTP only) from UCSD.Edu in directory "mailarchives/ham-equip".

We trust that readers are intelligent enough to realize that all text
herein consists of personal comments and does not represent the official
policies or positions of any party. Your mileage may vary. So there.

Date: Wed, 23 Mar 1994 15:00:24 GMT
From: ihnp4.ucsd.edu!swrinde!sgiblab!cs.uoregon.edu!reuter.cse.ogi.edu!hp-cv!hp-
pcd!hpcvsnz!davidc@network.ucsd.edu
Subject: 2m HT recommendations ?
To: ham-equip@ucsd.edu

Harland MacKenzie (harland@sabre.mech.ubc.ca) wrote:
: I am thinking about buying a 2m HT. I have read the glossy ads,
: in CQ and 73 but I can not come to any conclusions.

: Which do you use ? What are its good / bad points ?

: Is power important or is battery life more critical ?

: What features are important DTMF, CTCSS, pageing, ...

: I am looking at models from Kenwood, Yeasu, and I-COM. I am
: leaning toward the Kenwood TH-28A. I am also looking at the
: Yeasu F-11R and 411 as well as a few models from I-COM.

: I would appreciate any recommendations or info on these or
: other 2m HTs before I take the plunge and buy one.

: I do plan on carrying it with me once in a while but mostly I
: will use it in my car or at home.

: Thanks,
: Harland

I would also look at Standard. I have a Standard C168A (my wife does also). It is currently selling for I think around \$290. They also have some new models out, a C158A I think it is that is around \$250.00 and a C178A which is primarily a 2 meter rig but has 70cm but only with 100mW output on 70cm. I called HRO and they quoted me something like \$399 for this one.

Date: Wed, 23 Mar 1994 14:33:19 GMT
From: ihnp4.ucsd.edu!galaxy.ucr.edu!library.ucla.edu!europa.eng.gtefsd.com!
howland.reston.ans.net!vixen.cso.uiuc.edu!uwm.edu!mixcom.com!
kevin.jessup@network.ucsd.edu
Subject: 2m HT recommendations ?
To: ham-equip@ucsd.edu

In <Troyce-220394075547@idmb-secretary.tamu.edu> Troyce@bio.tamu.edu (Troyce) writes:

>In article <2m10k0\$3b4@nntp.ucs.ubc.ca>, harland@sabre.mech.ubc.ca (Harland
>MacKenzie) wrote:

>> What features are important DTMF, CTCSS, pageing, ...

>As far as features, you'll want CTCSS, so that you can access repeaters
>that require pl tones (important in crowded areas, or for closed
>repeaters).

CTCSS stands for Continuous Tone Coded Squelch System. The short way of saying that is PL DEcode. Emphasis on the "DE". PL ENcode will get you in to a repeater that requires a specific PL (sub audible tone) for access. CTCSS is an OPTION on some rigs and may not be needed unless you have interference from another system on the same frequency

(typical when the band opens up). With PL DEcode (CTCSS) activated, the received audio will not be passed through unless the proper sub-audible tone is detected. If the PL is set to the output of your local repeater, you will only hear your local repeater, and not that obnoxious one down in Chicago! ;-))

```
--  
/ '-_      kevin.jessup@mixcom.com  
{      }/      Marquette Electronics, Inc  
 \      /      N9SQB, ARRL, Amateur Radio  
 |__*|      N9SQB @ WD9ANY.#MKE.WI.USA.NA
```

Date: 23 Mar 94 14:52:00 GMT
From: news-mail-gateway@ucsd.edu
Subject: Batteries for HTX-202
To: ham-equip@ucsd.edu

Bob, VE7EMD asked about batteries for the HTX-202 2-meter handheld from Radio Shack.

I have had luck with ICOM BP-5 (drop-in charge, 500 mAH, 10.8V) batteries like those used for the IC-2AT.

I have also successfully used the DELCOM pack available from TNR and other battery suppliers. This is another IC@AT-compatible battery pack that holds 8 standard ni-cd AA cells and has a built-in charger/regulator like the ICOM BP-2 and BP-3 batteries, so you can charge it directly from a 12-14Volt power supply or an automobile lighter socket. It's a bit more fragile than the ICOM packs, but the price is right !

Good luck es 73 de KD1DJ.

Date: 22 Mar 94 20:31:19 GMT
From: agate!howland.reston.ans.net!news.intercon.com!panix!zip.eecs.umich.edu!newsxfer.itd.umich.edu!ncar!csn!jabba.cybernetics.net!not-for-mail@ucbvax.berkeley.edu
Subject: HTX-202
To: ham-equip@ucsd.edu

emd@ham.almanac.bc.ca wrote:
: I'm considering the purchase of the Radio Shack handheld as a spare

for any information that I can get on a SWAN 350. Im looking for manuals, schematics, and anything else I can get my hands on. I also welcome any advice on that you guys might have on working on this thing.

The current problems are:

1. CW key wont key transmitter.
2. Occasionally throws high voltage arcs inside the main unit or between the main unit and the power supply if they are too close together.
3. No Audio when transmitting voice.
4. Receive frequency is not stable. Sometimes sounds like the frequency knob is being spun wildly.

The transmitter puts a full 100 Watts into the dummy load when the radio is switched to "TUNE CW" and seems to have a fairly sensitive receiver when its working.

Some of the questions I am trying to get answers for right now are:

1. The CW key is hard wired to the connector and the plug is makeing good contact. Is this the proper way to hook up the key to this rig or is something else required?
2. I have seen radios that required a jumper in the auxiliary connector slot before the radio would key. Is the SWAN 350 one of those, and if so where should the jumper be?
3. What would cause the arcs? There is nothing obviously defective that I have found so far.
4. The system is not grounded. Is this causing the arcing problem, and will replacing the current power cord with a grounded cord fix the problem?

Thanks in advance for the help.

73.

Larry |^^^^^^|
(|(o) (o)|)

===!!!=====U=====!!!=====

Larry D. Frost Ham Call: KR4GU (formerly KD4YDG)
EE Support ingr!b24a!ldf!ldfrost
(205)730-8425 ldfrost@ldf.b24a.ingr.com

Intergraph Corporation, Huntsville, AL 35894-0001

Date: 23 Mar 1994 19:12:51 GMT
From: ihnp4.ucsd.edu!ucsnews!sol.ctr.columbia.edu!howland.reston.ans.net!
cs.utexas.edu!news.tamu.edu!furuta@network.ucsd.edu
Subject: Question on Yaesu ear mike
To: ham-equip@ucsd.edu

Recently I noticed that Yaesu seems to have added an ear mike to the line of accessories for their HTs. I don't have the literature here, but its number is something like MH-18 or MH-19. Does anyone have experience with this item? Does it work and how well?

Thanks.

--Rick
KE3IV

Date: 23 Mar 94 08:49:04 EDT
From: ihnp4.ucsd.edu!swrinde!gatech!udel!pacs.sunbelt.net!
DDEPEW%CHM.TEC.SC.US@network.ucsd.edu
Subject: QUESTIONS ON YAESU FT101E
To: ham-equip@ucsd.edu

Maybe some of you can help me. I recently bought a Yaesu FT101E and have had it on the air for about a week. The problem is that I have trouble tuning to other stations' frequencies on 75 meters, especially. This shows up mostly when I'm trying to check into a net, etc. Problem doesn't seem to be evident on 20M. Can you give me some hints in terms of tuning...difficult sometimes to gauge the other operator's voice pitch...I tend to tune a bit low based on pitch. Note: this is a pre-digital rig, with analog tuning and it is somewhat broadband. Any tips via Email would be most appreciated.

Thanks and 73's.

Dorr Depew
N4QIX

Date: Wed, 23 Mar 1994 14:57:54 GMT
From: ihnp4.ucsd.edu!dog.ee.lbl.gov!agate!howland.reston.ans.net!math.ohio-

state.edu!cyber2.cyberstore.ca!nwnexus!jhgrud!eskimo!wrt@network.ucsd.edu
Subject: RF and AF speech processors. Was: FT-990 vs TS-850
To: ham-equip@ucsd.edu

<2m19q1\$25h@hplvec.lvld.hp.com> <2mn2rd\$ol0@vixen.cso.uiuc.edu>
<cowart.764364068@neptune>
Organization: Eskimo North (206) For-Ever

In article <cowart.764364068@neptune>,
Michael Cowart <cowart@convex.com> wrote:
>ignacy@ux2.cso.uiuc.edu (Ignacy Misztal) writes:
>
>>It seems that the SSB quality depends on 3 factors:
>>1. Passband characteristics of the AF chain (including the
microphone),
>>2. IMD of the PA,
>>3. Type of processing, audio or RF?
>
>You are forgetting probably the most important factor, the voice
characteristics
>of the operator. I recently sold a radio to a friend of mine. During
the
>five years I had it, I consistantly got unsolicited comments on how
GOOD
>my audio sounded. My friend is always getting complaints on his.
>I have heard him on a TS520, TS430, and now the Yaesu FT980 (not 990)
>His voice sounds like, well like it is being compressed.
>I have a resonating, full "FM" sounding voice. He doesn't.
>Voices are like faces, everyone would rather look at a pretty face
>than an ugly one (unfortunately, his face is prettier than mine hi hi),
>and when you hear a good-sounding voice, you ususally will compliment
it.
>
>I know the purist (real ones and those who think they are) will take
exception
>to this, but most commercially available radios have similar TX
charactersitics.
>Yes, RF processors are superior than most AF ones, but in the 32 years
I have
>been hamming, I have found that voice characteristics determine who
gets
>unsolicited compliments.
>
>my \$.02 worth
>
>Mike WA5CMI
>
>Extra Class since 1973

>5-band WAS, WAZ, DXCC (303 cfmd)
>Ragchewer
>Electrical Engineer, CONVEX Computer Corp.
>The opinions are mine alone, not my employer's
>

Certainly true about the voice characteristics, but when a rig changes locations and starts getting poor audio complaints, one might want to be sure there is no "RF in the mike" syndrome present. Major RF levels will be obvious, but low levels might not. SSB is especially sneaky since the distortion only occurs on voice peaks, not the whole signal.

73 es gl
Bill Turner, W7LZP
wrt@eskimo.com

Date: Wed, 23 Mar 1994 20:50:43 GMT
From: ihnp4.ucsd.edu!library.ucla.edu!europa.eng.gtefsd.com!
howland.reston.ans.net!gatech!concert!unccsun.uncc.edu!usenet@network.ucsd.edu
Subject: Yaesu ft530 question
To: ham-equip@ucsd.edu

I'm new to ham radio and this news group, so bear with me if this question has already been answered many times.

Question: When jumper 13 is removed, will the FT530 receive cellular (800 MHz)? Yes, I know this is or will soon be illegal.

Thanks in advance.

Jerre M. Hill
UNC-Charlotte

Date: Wed, 23 Mar 1994 16:25:57 GMT
From: ihnp4.ucsd.edu!dog.ee.lbl.gov!agate!spool.mu.edu!howland.reston.ans.net!
news.intercon.com!psinntp!psinntp!psinntp!arrl.org!zlau@network.ucsd.edu
To: ham-equip@ucsd.edu

References <19MAR94.18754189.0121@UNBVM1.CSD.UNB.CA>,
<2m19q1\$25h@hplvec.lvld.hp.com>, <2mn2rd\$ol0@vixen.cso.uiuc.edu>
Subject : Re: RF and AF speech processors. Was: FT-990 vs TS-850

Ignacy Misztal (ignacy@ux2.cso.uiuc.edu) wrote:

: It seems that the SSB quality depends on 3 factors:

- : 1. Passband characteristics of the AF chain (including the microphone),
- : 2. IMD of the PA,
- : 3. Type of processing, audio or RF?

: I am wondering why the QST reviews do not mention the type of processing,
: which has a large effect on signal quality. Signals with audio processing
: have higher content of AF harmonics, and are subsequently less efficient

I don't understand why audio processing has to result in more audio harmonics. Aren't there digital signal processing algorithms that could prevent this effect? Even before DSP, didn't people use split band audio processing to reduce the content of harmonics?

: (3db?) and more difficult to tune. All cheaper rigs such as IC 725-737,
: FT 747-757, TS 430-450 use AF processing. IC 751-, FT990-, TS 830-
: use RF processing. I am not sure about the rest.

--

Zack Lau KH6CP/1 2 way QRP WAS
 8 States on 10 GHz
Internet: zlau@arrl.org 10 grids on 2304 MHz

Date: (null)

From: (null)

On the flip side the Kenwood TH28 would have been my second choice and I have heard good reports on it. There are alot of nice 2 meter HT's on the market and it makes the buying decision that much more complex.

If you are looking primarily for something for car or home use I would seriously consider a mobile rig instead of an HT. Then again that depends on how far you are from repeaters you intend to use etc. It doesn't take much of a hill for example to render your 2.5 watts from an HT pretty useless. On the other hand a good antenna will make a big difference over the rubber duck antenna.

Good Luck

Date: Thu, 24 Mar 1994 03:00:16 GMT

From: ihnp4.ucsd.edu!swrinde!gatech!wa4mei!ke4zv!gary@network.ucsd.edu

To: ham-equip@ucsd.edu

References <2ml9q1\$25h@hplvec.lvld.hp.com>, <2mn2rd\$ol0@vixen.cso.uiuc.edu>, <1994Mar23.162557.7558@arrl.org>

Reply-To : gary@ke4zv.atl.ga.us (Gary Coffman)

Subject : Re: RF and AF speech processors. Was: FT-990 vs TS-850

In article <1994Mar23.162557.7558@arrl.org> zlau@arrl.org (Zack Lau (KH6CP)) writes:

>Ignacy Misztal (ignacy@ux2.cso.uiuc.edu) wrote:

>

>: I am wondering why the QST reviews do not mention the type of processing,
>: which has a large effect on signal quality. Signals with audio processing
>: have higher content of AF harmonics, and are subsequently less efficient
>

>I don't understand why audio processing has to result in more audio
>harmonics. Aren't there digital signal processing algorithms that
>could prevent this effect? Even before DSP, didn't people use split
>band audio processing to reduce the content of harmonics?

Sure, and still do in broadcasting, but it isn't either easy or cheap, and the results still aren't that great. You have to process in 1/3 octave bands, and there are a lot of them at the lower end of the voice spectrum. You also have to adopt a control strategy that doesn't alter the amplitude relationships between octaves too much, or the time relationships *at all*, otherwise you screw up the frequency and phase response on a dynamic basis. That sounds *really* bad, worse than just harmonic distortion. Broadcast engineers seem to spend half their lives tinkering with the audio processing equipment. It's really easier to modulate, limit at RF, filter, and demodulate again rather than process properly at AF.

Gary

--

Gary Coffman KE4ZV		You make it,		gatech!wa4mei!ke4zv!gary
Destructive Testing Systems		we break it.		uunet!rsiatl!ke4zv!gary
534 Shannon Way		Guaranteed!		emory!kd4nc!ke4zv!gary
Lawrenceville, GA 30244				

End of Ham-Equip Digest V94 #76
